

Appl. No. 10/605,808
Amdt. dated January 02, 2006
Reply to Office action of October 03, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

- 1 (currently amended): A light emitting device comprising:
- 5 a micro-reflection structure carrier having a plurality of concave surfaces;
 a reflection layer formed conformably to said plurality of concave surfaces over
 ~~the micro-reflection structure carrier~~;
 a transparent adhesive layer formed over the reflection layer; and
 a light emitting stack layer formed over the transparent adhesive layer.
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- 2 (original): The light emitting device of claim 1 further comprising a first reaction layer
 between the reflection layer and the transparent adhesive layer.
- 3 (currently amended): The light emitting device of claim 1 further comprising a ~~second~~
15 reaction layer between the transparent adhesive layer and the light emitting stack layer.
- 4 (original): The light emitting device of claim 1 further comprising a first electrode and a
 second electrode formed on the same upper surface of the light emitting stack layer.
- 20 5 (withdrawn): The light emitting device of claim 1 further comprising a first electrode
 and a second electrode formed on the upper surface of the light emitting stack layer and
 the lower surface of the micro-reflection structure carrier respectively.
- 6 (currently amended): The light emitting device of ~~claim 1~~ claim 2, wherein the light
25 emitting stack layer comprises:
 a second reaction layer formed over the transparent adhesive layer;
 a first transparent conductive layer formed over the second reaction layer;

Appl. No. 10/605,808
Amdt. dated January 02, 2006
Reply to Office action of October 03, 2005

- a first contact layer formed over the transparent conductive layer;
- a first cladding layer formed between the first contact layer and the light emitting layer;
- a second cladding layer formed over the light emitting layer;
- 5 a second contact layer formed over the second cladding layer;
- a first electrode; and
- a second electrode formed over the second contact layer.

7 (original): The light emitting device of claim 6, wherein the transparent conductive
10 layer has a first surface area and a second surface area, the first contact layer is formed over the first surface area, and the first electrode is formed over the second surface area.

8 (original): The light emitting device of claim 7 further comprising a transparent carrier
15 between the second reaction layer and the transparent conductive layer.

9 (withdrawn): The light emitting device of claim 6, wherein the micro-reflection
structure carrier is a conductive micro-reflection structure carrier, the transparent
adhesive layer is a transparent conductive adhesive layer, and the first electrode is
20 formed over a lower surface of the conductive micro-reflection structure carrier.

10 (original): The light emitting device of claim 1, wherein the shape of the
micro-reflection structure carrier comprises at least one shape selected from a group
consisting of a hemisphere and a pyramid.

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11 (original): The light emitting device of claim 1, wherein the micro-reflection structure
carrier comprises at least one material selected from a group consisting of GaP, GaAs,
GaAsP, InGaP, AlGaInP, AlGaAs, Si, SiC, glass, BN, AlN, and Ge.

Appl. No. 10/605,808
Amdt. dated January 02, 2006
Reply to Office action of October 03, 2005

- 12 (withdrawn): The light emitting device of claim 9, wherein the conductive
micro-reflection structure carrier comprises at least one material selected from a
group consisting of Si, GaAs, SiC, GaP, GaAsP, InGaP, AlGaInP, AlGaAs, BN, and
5 AlN.
- 13 (original): The light emitting device of claim 8, wherein the transparent carrier
comprises at least one material selected from a group consisting of GaP, SiC, Al₂O₃,
and glass.
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- 14 (original): The light emitting device of claim 1, wherein the reflection layer comprises
at least one material selected from a group consisting of Sn, Al, Au, Pt, Zn, Ag, Ti, Pb,
Pd, Ge, Cu, AuBe, AuGe, Ni, PbSn, and AuZn.
- 15 15 (currently amended): The light emitting device of claim 1, wherein the transparent
adhesive layer comprises at least one material selected from a group consisting of
polyimide (PI), ~~benzocyclobutane~~ benzocyclobutene (BCB), and
perfluorocyclobutane (PFCB).
- 20 16 (original): The light emitting device of claim 2, wherein the first reaction layer
comprises at least one material selected from a group consisting of SiNx, Ti, and Cr.
- 17 (currently amended): The light emitting device of claim 3, wherein the ~~second~~ reaction
layer comprises at least one material selected from a group consisting of SiNx, Ti, and
25 Cr.
- 18 (original): The light emitting device of claim 6, wherein the second reaction layer
comprises at least one material selected from a group consisting of SiNx, Ti, and Cr.

Appl. No. 10/605,808
Amdt. dated January 02, 2006
Reply to Office action of October 03, 2005

19 (withdrawn): The light emitting device of claim 9, wherein the transparent conductive adhesive layer comprises at least one conductive material selected from a group consisting of intrinsically conducting polymer, and polymer mixed with conducting material.

20 (withdrawn): The light emitting device of claim 19, wherein the conducting material comprises at least one material selected from a group consisting of indium tin oxide, cadmium tin oxide, antimony tin oxide, zinc oxide, zinc tin oxide, Au, and Ni/Au.

21 (original): The light emitting device of claim 6, wherein the first cladding layer comprises at least one material selected from a group consisting of AlGaInP, AlN, GaN, AlGaN, InGaN, and AlInGaN.

22 (original): The light emitting device of claim 6, wherein the light emitting layer comprises at least one material selected from a group consisting of AlGaInP, GaN, InGaN, and AlInGaN.

23 (original): The light emitting device of claim 6, wherein the second cladding layer comprises at least one material selected from a group consisting of AlGaInP, AlN, GaN, AlGaN, InGaN, and AlInGaN.

24 (original): The light emitting device of claim 6, wherein the first contact layer comprises at least one material selected from a group consisting of GaP, GaAs, GaAsP, InGaP, AlGaInP, AlGaAs, GaN, InGaN, and AlGaN.

25 (original): The light emitting device of claim 6, wherein the second contact layer comprises at least one material selected from a group consisting of GaP, GaAs, GaAsP,

Appl. No. 10/605,808
Amdt. dated January 02, 2006
Reply to Office action of October 03, 2005

InGaP, AlGaInP, AlGaAs, GaN, InGaN, and AlGaIn.

26 (original): The light emitting device of claim 6, wherein a second transparent
conductive layer is formed between the second electrode and the second contact layer.

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27 (original): The light emitting device of claim 6, wherein the first transparent
conductive layer comprises at least one material selected from a group consisting of
indium tin oxide, cadmium tin oxide, antimony tin oxide, zinc oxide, and zinc tin
oxide.

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28 (original): The light emitting device of claim 26, wherein the second transparent
conductive layer comprises at least one material selected from a group consisting of
indium tin oxide, cadmium tin oxide, antimony tin oxide, zinc oxide, and zinc tin
oxide.

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